Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 4-17, 26-29, 31-40, 49, and 51-86 are pending in the application, with 1, 26, 49, 53, 57, 61, and 83 being the independent claims. Claims 83-86 are new. Claims 3, 4, 18-25, 30, 41-48 and 50 were previously canceled. Claims 5, 6, 29, 31, 64, and 65 are canceled. Claims 1, 7, 26, 32, and 66 are amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowable Subject Matter

Applicants acknowledge with appreciation the Examiner's indication that claims 53-60, 79, and 80 are allowed, and that claims 9-12, 35-38, and 68-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claims 68-71 have been rewritten as new claims 83-86 above. Applicants therefore respectfully request that the allowability of new claims 83-86 be indicated in a subsequent communication.

Rejections under 35 U.S.C. § 102

In paragraph 3 of the Office Action, claims 1, 26, 28, 39, 40, 49, 51, 61, 75-78, 81, and 82 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,760,629 to Uribe *et al.* (hereinafter Uribe). Applicants respectfully traverse this rejection.

Technical differences exist between Uribe and the claimed embodiments of the present invention. Uribe does not teach or suggest an integrator that includes an amplifier, a capacitor, and a variable resistor arranged in an integrating amplifier configuration, as recited in claim 1.

Thus, Applicants assert that claim 1 is patentable over Uribe for at least these reasons. Furthermore, independent claims 26, 49, and 61, are also patentable over Uribe for at least these reasons, and further in view of their own features. Claims 5, 6, 29, 31, 64, and 65 are canceled. Claims 7, 13-17, 27-28, 32-33, 39, 40, 51, 66, 72-78, 81, and 82, which depend from independent claims 1, 26, 49, and 61, are also patentable over Uribe for the reasons describe above, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

Rejections under 35 U.S.C. § 103

In paragraph 6 of the Office Action, claims 2, 4, 16, 17, 27, 52, 62, and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Uribe. In paragraph 7 of the Office Action, claims 5-8, 13-15, 29, 31-34, 64-67, and 72-74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Uribe in view of U.S. Patent No. 6,204,789 to Nagata (hereinafter Nagata) or U.S. Patent No. 6,084,465 to Dasgupta. Applicants

respectfully traverse these rejections. Applicants note that the features of dependent claim 6 have been incorporated into independent claim 1 in the above amendment.

With respect to claims 5-8, 13-15, 29, 31-34, 64-67, and 72-74, in paragraph 7 of page 4 the Office Action stated:

> Urabe teaches all subject matter claimed except for particularly implementing the integrator using amplifier, capacitor and variable resistor as claimed. However, Nagata or Dasgupta teaches implementing the integrator having the components as claimed. See figure 17A and column 15, lines 24-27 of Nagata and figures 1A, 3A, 4A and 5 of Dasgupta. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the integrator of Urabe using the implementation as taught by Nagata or Dasgupta since it is just an alternative way of implementing the integrator.

Applicants respectfully disagree with this assertion, as the circuits disclosed by Nagata and Dasgupta are not combinable with the DC offset compensation device of Urabe. Because Uribe cannot be combined with Nagata and Dasgupta, a *prima facie* case of obviousness has not been presented in the Office Action.

FIG. 1 of Uribe shows the DC offset compensation device including a compensator 1, a level detector 2, a time constant control circuit 3 and an estimator 4. "The compensator 1 subtracts an estimate d inputted from the estimator 4 from an input signal a" (col. 9, lines 11-18 of Uribe). FIG. 4 of Uribe shows detailed structure of estimator 4 shown in FIG. 1. In FIG. 4, estimator 4 includes a first integrator 41, a comparator 42 and a second integrator 43. "The compensation signal e is first integrated at the first integrator 41 to become a first integration output e1. The comparator 42 compares the first integration output e1 with a reference value (described later) defined by the time constant control signal c to obtain a comparison output e2. The second integrator 43 integrates the comparison output e2 to obtain the estimate d. The first

integrator 41 is reset when the comparison output e2 is other than 0" (col. 11, 39-49 of Uribe).

FIG. 5 of Uribe shows further detail of first integrator 41. Regarding FIG. 5, Uribe states:

> FIG. 5 is a block diagram showing an example of a first structure of the first integrator 41 shown in FIG. 4. In FIG. 5, the first integrator 41 includes an adder 411 and a register 412. The register 412 normally stores outputs from the adder 411, and resets its held value e0 to 0 when receiving a reset signal. The reset signal is a comparison output e2 (described later) having a value other than 0 outputted by the comparator 42. The adder 411 adds the compensation output e to the held value e0 of the register 412 to obtain the first integration output e1. Therefore, the first integrator 41 cumulatively adds the inputted signals during a period of not being reset by the comparison output e2.

(col. 11, lines 50-61). Thus, as taught by Uribe, first integrator 41 appears to have a digital structure (e.g., register 412 storing outputs from adder 411, and resetting its held value e0 to 0 when receiving a reset signal). Second integrator 43 of FIG. 4 has a similar structure and functionality as first integrator 41, as shown by FIG. 7 and related text of Uribe.

Dasgupta and Nagata relate primarily to analog circuits. For example, see figures 1A, 3A, 4A, and 5 of Dasgupta and see figure 17A and column 15, lines 24-27 of Nagata. It is not clear how the analog circuits of Dasgupta and Nagata could be combined with the digital structure of Uribe. As stated in M.P.E.P. section 2143.02, the "prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)[.]" However, in the present Office Action, it has not been explained how Dasgupta and Nagata can be combined with Uribe with a reasonable expectation of success, due to their apparent inherent differences in technology - analog

versus digital. Thus, a *prima facie* case of obviousness has not been presented in the Office Action.

For at least these reasons, Applicants assert that claim 1 is patentable over Uribe, Dasgupta, and Nagata, alone or in combination. Independent claims 26, 49, and 61 are also patentable over Uribe, Dasgupta, and Nagata for at least these reasons, and further in view of their own features. Claims 2, 4, 7-17, 27, 28, 32-40, 51-60, 62, 63, and 66-82, which depend from independent claims 1, 26, 49, and 61, are also patentable over Uribe, Dasgupta, and Nagata for the reasons described above, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

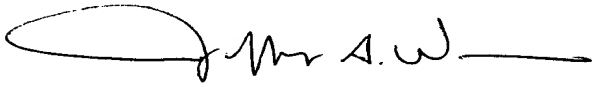
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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